

WHAT IS CLAIMED IS:

1. An organic electroluminescent display device comprising a plurality of light-emitting elements formed of light-emitting films
5 above a substrate each containing organic electroluminescent materials and being sandwiched by a pair of electrodes, wherein each pixel of said display device is formed by two light-emitting elements producing two different colors of predetermined chromaticity values, and
10 each of said colors has a gradation.

2. The organic electroluminescent display device according to claim 1, wherein a mixture of said two different colors can produce a white color which is designated by a white region in a CIE xy
15 chromaticity diagram (JIS Z8110).

3. The organic electroluminescent display device according to claim 1, wherein a mixture of said two different colors produces colors falling within a circular area of a 0.1 radius with its center
20 in a pure white coordinate (0.31, 0.316) in the CIE xy chromaticity diagram.

4. The organic electroluminescent display device according to claim 1, wherein said two different colors are selected from red
25 (R), green (G), blue (B), cyan (C), magenta (M) and yellow (Y).

5. The organic electroluminescent display device according to claim 1, wherein one of said two different colors is white and the other is one selected from red (R), green (G), blue (B), cyan (C), magenta (M) and yellow (Y).

6. The organic electroluminescent display device according to claim 1, wherein said chromaticity values of two different colors are controlled by changing a concentration ratio of said organic electroluminescent materials or by coupling with a foreign material.

7. The organic electroluminescent display device according to claim 1, wherein said chromaticity values of two colors are controlled by changing thickness of said light-emitting film.

8. The organic electroluminescent display device according to claim 1, wherein said light-emitting elements are fabricated by a photo bleaching process applied to said light-emitting film.

9. The organic electroluminescent display device according to claim 1, wherein each said light-emitting element is formed every color conversion filter which converts a color of light emitted from said light-emitting film, respectively.

10. The organic electroluminescent display device according to

claim 9, wherein said color conversion filters are color filters.

11. The organic electroluminescent display device according to claim 9, wherein said color conversion filters are luminescent color
5 conversion filters.

12. The organic electroluminescent display device according to claim 1, wherein said light-emitting film is formed by a coating method or a printing method.

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13. The organic electroluminescent display device according to claim 1, wherein said two different color light-emitting elements have different emissive areas based on each lifetime of said light-emitting elements.

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14. The organic electroluminescent display device according to claim 1, wherein said light-emitting element is driven by an electric current of a different level for each color.

20 15. The organic electroluminescent display device according to claim 1, wherein said light-emitting element is driven by a voltage of a different level for each color.